



NAVY DEPARTMENT

## BUMED NEWS LETTER

a digest of timely information

Editor - Captain F. W. Farrar. (MC). U.S.N.

Vol. 7

Friday, May 24, 1946

No. 11

TABLE OF CONTENTS

|   |  |
|---|--|
| Radioactive Phosphorus in Therapy....2  | Streptomycin: Aspects re Use of...16   |
| War Wounds of the Liver .....4          | Streptomycin: Varying Toxicity.....17  |
| Sensitivity to Sulfonamides.....6       | Immune Serum Globulin in Measles .18   |
| Dermatitis from Sulfonamides.....7      | Hepatitis: Caution re Elucidated....19 |
| Induced Sulfonamide Sensitization.....7 | Reports on Research Projects .....21   |
| Therapy of Infectious Hepatitis .....8  | Further Training in MC-USN.....23      |
| Hepatitis via Transfusion.....13        | Refresher Course at NMS, NNMC....24    |
| Control of Hepatitis via Water.....14   | Army Industrial College Renamed...24   |
| Penicillin in Ocular Infections .....15 | Public Health Foreign Reports.....25   |

Circular Letters:

|  |                   |
|--|-------------------|
| Medical Records of American Red Cross Personnel .....        | BuMed.....26      |
| Marital Contacts of USN and MarCorps VD Patients .....       | BuMed.....26      |
| Photofluorographic Units, Assignment of .....                | BuMed.....27      |
| All Med. Dept. Activities to Use Standard Unit Prices.....   | BuMed.....29      |
| MarCorps Separation Procedures: Med. Dept. Processing in ..  | Joint Ltr .....38 |
| Disestablishment of Naval Medical Activities .....           | SecNav .....39    |
| Redesignation of U.S. Naval Hospital, Sampson, N. Y. ....    | SecNav .....40    |
| Alnav 183 - Nurse Corps Pay and Allowances.....              | SecNav .....40    |
| Alnav 195 - Disposition of Narcotics.....                    | SecNav .....41    |
| Alnav 197 - Transfer to Regular Navy (Dental Corps) .....    | SecNav .....41    |
| Alnav 198 - Regular HC Personnel on Board .....              | SecNav .....41    |
| Physical Classification of Fleet Reservists .....            | BuPers.....42     |
| Pension Claims and Medical Records of Released Personnel ... | BuMed.....44      |
| Air Transportation for Remains of Naval Deceased .....       | BuMed.....47      |

(Not Restricted)

Radioactive Phosphorus as a Therapeutic Agent: Radioactive phosphorus ( $P^{32}$ ) emits beta-rays capable of producing a profound radiation effect on tissues. The therapeutic use of this substance has certain advantages compared with x-radiation: it is selectively concentrated in organs with a high phosphorus content such as bone, and in tissues the cells of which are multiplying rapidly; it is easy to administer, and therapeutic doses never give rise to radiation sickness. The half-life of  $P^{32}$  (14.3 days) permits steady radiation of tissues for several weeks, yet is short enough so that the destructive effect on tissues can be controlled.

From an analysis of (1) the literature on radioactive-phosphorus therapy and of (2) the results obtained in the treatment of 155 patients at the Mallinckrodt Institute of Radiology, the authors consider that the following conclusions are justified:

1. Radioactive phosphorus is probably the best therapeutic agent available at the present time for polycythemia vera. Complete hematologic and almost complete symptomatic remissions can be produced with  $P^{32}$  in the vast majority of patients, and remission from a single course of treatment may last for from six months to several years or longer. It is not possible at present to evaluate the effect of radioactive-phosphorus therapy on the duration of life of these individuals.
2. Therapy with  $P^{32}$  has very little effect on the clinical course of patients with acute or subacute myelogenous leukemia but produces at least as complete clinical and hematologic remissions as x-radiation in the chronic form of the disease. Freedom from radiation sickness is a practical advantage which patients who have had previous x-ray therapy appreciate. The duration of life, from the first symptom of myelogenous leukemia until death, of the patients treated at the Mallinckrodt Institute of Radiology suggests that  $P^{32}$  therapy prolongs life to approximately the same extent as does x-ray therapy (about six months).
3. In the great majority of patients, the clinical course of acute lymphatic leukemia is not favorably influenced by  $P^{32}$  therapy. In a few patients clinical improvement has been observed, and one patient had almost complete hematologic and symptomatic remission for a period of five and one-half months. However, equally dramatic spontaneous remissions of acute lymphatic leukemia have been observed in the Institute as elsewhere. In the treatment of chronic lymphatic leukemia,  $P^{32}$  is probably as satisfactory as, but no better than, roentgen radiation.
4. Radioactive phosphorus is of no value in the treatment of monocytic leukemia.



(Not Restricted)

5. Hodgkin's disease, lymphosarcoma, reticulum cell sarcoma, and multiple myeloma do not respond as favorably to  $P^{32}$  as they do to x-radiation.

6. From observations on the few patients who have been treated, there is no reason to believe that  $P^{32}$  is a satisfactory therapeutic agent for the treatment of lymphoepithelioma, malignant melanoma, carcinoma of the gall-bladder, carcinoma of the breast, Ewing's tumor, mycosis fungoides or xanthomatosis.

7. In patients with all the various types of diseases which have been treated,  $P^{32}$  has been shown to have a profound effect on the bone marrow; and severe leucopenia, thrombocytopenia, and anemia may occur as complications of the therapy. There is wide variation in the dosage of radioactive phosphorus required to produce these complications in different individuals. When more than one of the cellular elements of the marrow were depressed in the same individual, the cytologic changes in the peripheral blood usually occurred in the following order: the leucocyte level decreased first, the thrombocyte level second, and the erythrocyte level was affected last.

8. In patients with any type of chronic leukemia, roentgen radiation is more effective in some cases than  $P^{32}$  in bringing about a rapid reduction in the size of the spleen or lymph nodes. Therefore, x-rays should be employed whenever the prompt reduction of nodes or the spleen is necessary to relieve symptoms or remove pressure on some vital organ. Roentgenotherapy may be used to supplement radioactive-phosphorus therapy for this purpose.

9. In patients with polycythemia vera, chronic myelogenous leukemia and chronic lymphatic leukemia,  $P^{32}$  therapy must be individualized to a high degree, and the final total dosage for any patient must be determined on the basis of repeated blood and bone marrow studies and clinical observations. The radioactive phosphorus is administered in the form of the dibasic sodium salt in isotonic solution which constitutes 15 mg. of  $Na_2HPO_4$  per c.c. of water.

10. At present, several different methods are employed in different laboratories for the assay of the activity of solutions of radioactive-phosphorus salts. When the same sample of radioactive disodium acid phosphate solution was assayed in several laboratories, widely divergent results were obtained. This fact must be kept in mind in calculating dosage. An attempt is being made to correct this discrepancy. (J. Lab. & Clin. Med., Feb. '46 - Reinhard et al.)

\* \* \* \* \*



(Not Restricted)

War Wounds of the Liver: In discussions of liver wounds based upon World War I experience, hemorrhage usually was considered the chief cause of fatalities and complications.

Early observations and experience in World War II led the authors to believe that hepatic parenchymal damage and bile leakage were of greater significance than hemorrhage and therefore caused them to alter their mode of surgical care.

The data are based upon 829 patients with wounds of the liver taken from a group of 3,154 abdominal and thoracoabdominal cases occurring in the Mediterranean and Southern European Campaigns during the period 1 January 1944 through 8 May 1945, and apply only to the course while in the forward hospitals where the initial surgery was performed.

The route of injury to the liver was abdominal in 46.2 per cent of these cases and thoracoabdominal in 53.8 per cent. Coincidental wounds of other abdominal viscera complicated 59.2 per cent of these cases.

The over-all mortality rate for this series of wounds of the liver was 27.0 per cent (66.2 per cent in World War I). The over-all mortality rate for the cases treated in 1944 was 29.8 per cent, while that for the period in 1945 was 16.9 per cent. Associated factors such as the wounding agent, the time lag from injury to surgery, adequate treatment for shock and the use of sulfonamides and penicillin may have also influenced the morbidity and mortality in this group. The number of other viscera involved in association with the liver wound represented the most important single factor in prognosis. The mortality rate was 9.7 per cent in wounds involving only the liver, 26.5 per cent when the liver and one other organ were injured and 84.6 per cent when the liver and four or more other viscera were damaged.

In none of these 829 cases was death ascribed to bleeding from the liver during the postoperative period in the forward hospitals. In only 9 per cent of the group was active bleeding from the liver found at the time of exploration. In 91 per cent of the cases, therefore, spontaneous hemostasis had occurred by the time of operation. It was found that the bleeding caused by the placement of sutures in an attempt to close a wound of the liver may exceed that which existed previously.

Among those who did not survive, "shock" was listed as the chief cause of death in 51.4 per cent (115 cases); pulmonary complications in 17.0 per cent; peritonitis in 12.7 per cent; renal failure in 8.5 per cent; and other causes in 10.7 per cent.



(Not Restricted)

With increased experience, the use of drains rose from 48.5 per cent in 1944 to 87.4 per cent in 1945 with a corresponding reduction in the use of the liver pack from 34.1 per cent to 9.6 per cent. The decrease in mortality rate in 1945 paralleled the decreased use of the liver pack.

The authors consider that the establishment of adequate external drainage of both bile and products of tissue injury is the most important feature in the surgical care of liver wounds. They state that the dry pack so generally advocated in the literature for its hemostatic value will not function as a drain. A temporary pack, however, may be effective in checking bleeding during the operation. The pack, whether used alone or in conjunction with drains, tends to act as a tampon, causing pocketing of bile and exudates and formation of abscesses. Secondary hemorrhage following the removal of a pack may occur.

The placing of the wick end of a Penrose cigarette drain to act as a clot-supporting surface against a liver wound which is still oozing a little should control the situation. This also provides drainage. In large or separate wounds, at least two drains should be inserted down to these wounds, with additional drains lateral to the liver and to the subhepatic spaces to prevent pooling of bile and exudates in these regions. All drains are delivered through a dependent drainage incision, usually placed subcostally, in the anterior or midaxillary line. This drainage incision must be at least 1-1/2 inches in length and cleanly incised through all layers of the abdominal wall to avoid constriction of the drains. The drains should not be brought to the exterior through the laparotomy or thoracotomy incision since this leads to higher incidence of wound infections and disruptions.

The proper removal of the drains holds as important place in the treatment of the liver wounds as does the initial placing of the drains. The shortening must be gradual, beginning usually on the fourth or fifth postoperative day. The drains are taken out completely, preferably by the tenth to twelfth postoperative day, although complete removal should be deferred until drainage has virtually ceased. Frequently, such a staged removal of Penrose cigarette drains becomes difficult because of the adherence of the gauze wick to the liver bed. Because the free outer ends will stretch before the inner ends are moved, the sudden "give" following traction or twisting of the drains may withdraw the drains too far; fluid collections are thus likely to become pocketed in the liver region. To avoid such a possibility, the authors use drains in which the tendency to stretch has been eliminated. This is accomplished simply by threading surgical tape through the Penrose tubing and anchoring the tubing to it at intervals of from 3 to 4 inches by means of silk suture. Thus, when the free outer end of the drain is withdrawn an inch, the inner end is withdrawn a like distance.

(Not Restricted)

Rarely is a liver wound too small to be drained. Some cases will not drain bile postoperatively, but the authors know of no criteria by which such cases can be selected preoperatively or at operation. The size of the missile is not the all-important factor. A small foreign body which cuts a main bile passage may be followed by a greater drainage of bile than a superficial liver wound of greater proportions. For this reason, all suspected liver wounds should be explored and adequate external drainage established. (U. S. Army M. Dert. Bull., May '46 - Madding et al.)

\* \* \* \* \*

(Not Restricted)

Toxic Reactions Accompanying Second Courses of Sulfonamides in Patients Developing Toxic Reactions During a Previous Course: A study was made which confirms the generally-held opinion that in most instances, sensitivity to the sulfonamides is relatively specific for the individual drug, but that in some cases a group sensitivity develops which includes several or all of the sulfonamide drugs.

Seventy-eight patients received a second course of a sulfonamide drug after showing fever, dermatitis or conjunctivitis during the first course. Statistically significant is the fact that among 48 patients to whom the same sulfonamide was given during both courses, 33, or 69 per cent, developed toxic manifestations, while only five, or 17 per cent among the 30 patients who received a different sulfonamide in the second course, experienced a toxic reaction.

The particular sulfonamide drug used during the first or second course seemed to make no difference. The three drugs most frequently administered during the two courses, sulfathiazole, sulfadiazine and sulfamerazine, produced toxic reactions during the second course in 69, 70 and 69 per cent respectively of the patients to whom they were administered.

Neither the number of different manifestations of toxic reaction developing in any patient during the first course, nor the intervals elapsing between the two courses seemed to have any effect upon the appearance of toxic reactions of any particular variety during the second course.

Third courses of a sulfonamide were given to nine patients who had manifested toxic reactions to the first two courses of the same sulfonamide. Only five of these patients developed a toxic manifestation.

All attempts to prevent toxic reactions from recurring were unsuccessful.



(Not Restricted)

It is concluded that the patient who has previously experienced fever, dermatitis or conjunctivitis when receiving one of the sulfonamide drugs, compared with a patient who did not manifest a toxic reaction when previously given a sulfonamide, will run more risk of a similar reaction during a subsequent period of treatment with any of the sulfonamide drugs, even though a considerable interval of time may have elapsed between courses. If such a patient must be given a sulfonamide again, he should receive a different drug from the one used during the first course, and should be observed carefully for toxic reactions. (Ann. Int. Med., April 1, '46 - Dowling et al.)

\* \* \* \* \*

Dermatitis from Sulfonamides: The sites of experimental standard, third degree, thermal burns in 218 subjects were treated with either sodium sulfadiazine, sulfadiazine, sulfathiazole or sulfanilamide, each in identical oil-in-water emulsion creams.

Slight to severe dermatitis developed in 28 of 52 subjects treated with five per cent sodium sulfadiazine cream, in 2 of 55 treated with 5 per cent sulfadiazine, in 5 of 59 treated with five per cent sulfathiazole and in 10 of 52 treated with five per cent sulfanilamide. An additional 8 subjects gave positive patch tests to sodium sulfadiazine, 8 to sulfadiazine, 14 to sulfathiazole and 5 to sulfanilamide.

Some cross sensitivity was demonstrated. Oral administration of sulfadiazine caused a recrudescence or intensification of dermatitis due to the application of sulfanilamide cream in 5 of 7 subjects, but it did not cause skin eruptions in patients without previous dermatitis from the topical application of sulfonamides even when the patch test was positive. (OEMcmr-103, Sulzberger et al., Cornell Univ. - CMR Bulletin #71)

\* \* \* \* \*

(Not Restricted)

Induced Sensitivity from the Topical Use of the Sulfonamides: Induced sensitivity from the topical use of the sulfonamides is a common occurrence. The author believes that the incidence of sulfonamide sensitization is increasing, states that it is the duty of dermatologists to campaign against the indiscriminate use of sulfonamides and recommends as follows:

1. Avoid the local use of sulfonamides in trifling cutaneous lesions and reserve them for treating serious coccal skin infections.
2. When sulfonamides are considered essential, limit their use to a period of no longer than seven days.

(Not Restricted)

3. During the employment of sulfonamides instruct the patient to avoid solar and quartz lamp exposures.
4. Despite the fact that patch testing is recommended and is frequently used to determine sensitivity to the sulfonamides, it must be kept in mind that a patch test can occasionally cause a severe flare-up, far worse than the original dermatitis.

(Pennsylvania M. J., Jan. '46 - Bechet)

\* \* \* \* \*

(Not Restricted)

Therapy of Infectious Hepatitis: Of the various recognized forms of hepatitis, that due to a transmissible filterable agent is undoubtedly the most prevalent. The onset of infectious hepatitis may be quite similar to that of other acute infections. However, the subsequent course of the disease is not as characteristic of an infectious process as of a metabolic syndrome resulting from serious damage to the liver.

The prodromal symptoms of infectious hepatitis are shared with many common infections. The disease in its acute phase, therefore, may often be confused with upper respiratory infections, atypical pneumonia, influenza and infectious mononucleosis. Differentiation of hepatitis from gastrointestinal disorders is frequently difficult. An erroneous diagnosis of Weil's disease, amebic hepatitis, malarial hepatitis, hemolytic jaundice or biliary obstruction may be given to the disease once jaundice has appeared.

An unequivocal diagnosis of hepatitis can be made occasionally in the preicteric stage of the disease and in those cases in which clinical icterus does not develop, on the basis of the clinical history and the presence of an enlarged and tender liver upon physical examination. In the majority of these cases, however, recourse must be had to certain carefully performed tests of liver function. Those tests which are most reliable and least subject to error in interpretation are the bromsulfalein-retention test, the determination of plasma bilirubin and the thymol turbidity reaction.

In order to discuss the therapy of hepatitis in a rational manner, the disease should be considered in at least four possible stages, namely, acute hepatitis, hepatitis with delayed convalescence, chronic hepatitis and cirrhosis.

Although certain principles in therapy apply to the syndrome of hepatitis as a whole, no single regimen can be expected to cover adequately all metabolic variations in the disease, or all complications.



(Not Restricted)

In approximately 80 per cent of cases, infectious hepatitis is a self-limited disease. In this group, spontaneous recovery, in so far as it can be detected by clinical and laboratory means, occurs within from 40 to 50 days after the onset of symptoms. Until more specific means have been devised for the care of patients with hepatitis, most is accomplished by restricting therapy to those measures which are believed to hasten repair of the damaged liver. Bed rest, with limitation of activity, is of paramount importance and should be instituted immediately following diagnosis of the acute disease. As the patient begins to improve, and when he begins to become restless under restraint, graded activity, carefully supervised, should be permitted. Gradually the patient is allowed to have "head" privileges, to bathe himself and to be up and about the ward for short intervals. However, full activity should not be permitted until tests of liver function have revealed normal values and the clinical state of the patient has warranted the assumption that convalescence is complete. Despite these precautions, some patients with hepatitis develop recurrences or relapses of the disease following resumption of full activity. The recurrences are frequently asymptomatic, and can be recognized only by the aid of serial tests of liver function. Patients showing relapses, as indicated through laboratory studies, should be promptly returned to bed and kept under close supervision until normal values for liver function are re-established.

It is now almost universally admitted that a diet high in protein and carbohydrate is optimum for hastening repair of the liver. Diets exceedingly low in fat, once so much in vogue in the treatment of hepatitis, are no longer justifiable. Anorexia is often a troublesome feature in the management of the patient in the acute stages of hepatitis. Diets which are largely free of fat may contribute further to anorexia, since they are particularly unappetizing. They are also frequently low in calories and in fat-soluble vitamins in relation to their bulk. The dictum against inclusion of fat in the diets of patients with infectious hepatitis doubtless arose from an earlier notion that the disease was associated with obstruction of the major bile ducts. While obstruction of the finer biliary radicles may occur in infectious hepatitis, it is primarily a disease of the hepatic parenchyma and not of the major bile passages as claimed by Virchow. In its acute stage the disease is characterized by inflammation and variable amounts of necrosis of the liver, often with a striking absence of visible fat.

In a series of patients with infectious hepatitis studied at the Rockefeller Hospital, no evidence of harm could be demonstrated as a result of the consumption of from 100 to 150 grams of fat daily, when accompanied by a daily intake of from 100 to 150 grams of protein. It was found that an adequate caloric intake was much easier to maintain in patients receiving added fat than in a control group in which the fat was kept below 50 grams daily. Fried

(Not Restricted)

fats or fats subjected to exceptionally high temperatures in cooking were avoided. When the type of fat was limited chiefly to that contained in milk, butter and eggs, and in boiled or baked animal protein, patients with hepatitis experienced no difficulty whatsoever in consuming from 100 to 150 grams of fat daily during the entire period of the disease from its incipient stages through convalescence. Although the data are not complete, it would appear from a survey of the influence of various diets that the optimum diet for treatment in hepatitis is one which contains on the average of from 125 to 150 grams of protein, from 90 to 120 grams of fat and sufficient carbohydrate to provide an adequate caloric intake. Improved appetite and caloric intake may be obtained in the average patient with hepatitis when he is allowed to exercise considerable selection in his diet.

Patients with severe infectious hepatitis may show complete disinclination to eat for a period of several days. Anorexia, combined with an extraordinary tendency of the patient with hepatitis to lose weight, may make it difficult to maintain a positive nitrogen balance in the early stages of the disease. Individual attention must be given in these cases in order to achieve an adequate caloric intake in the patient. Frequent small feedings throughout the day may be required. Parenteral therapy with glucose and protein hydrolysates may be indicated. If parenteral feeding is carried out, vitamin supplements should be supplied. Otherwise, a diet high in protein and carbohydrate and adequate in fat will meet the daily requirements for the vitamins and minerals.

The authors believe that patients should not use alcoholic beverages for a period of at least six months following complete recovery of hepatic function.

Particular caution should be exercised in the use of barbiturates and morphine in patients with hepatitis. The optimum doses for most drugs have been worked out in subjects with normal hepatic function. In the presence of depressed liver activity many of the ordinary drugs are poorly tolerated. Overdosage and excessively sustained effects are commonly observed in hepatitis following the administration of both depressants and stimulants, because of the inability of the damaged liver to accomplish normal rates of destruction.

In approximately 1.8 per cent of patients with hepatitis, the period required for convalescence exceeds the average considerably. Additional time required for convalescence in this group may be weeks, or even months. Frequently these patients do not appear ill, although they may complain of weakness, fatigue and pain, and tenderness over the liver area. Tests of liver function frequently provide the main objective basis for these complaints. Patients in whom complete studies are not made, frequently have to bear the stigmata of hypochondriasis and neurosis. Patients with delayed convalescence either recover slowly over a period of months, or eventually take on the aspects of



(Not Restricted)

chronic liver disease. For these patients, care not unlike that given in sanatoria for tuberculosis, for a limited period at least, would appear to be indicated. Strict adherence to a regimen of regular sleep and graded activity should be required. Close dietary supervision, with special attention to intermittent periods of anorexia, is necessary in order to maintain adequate nutrition. Evaluation of liver function at monthly or bimonthly intervals should be carried out in order to detect remission or progression of liver insufficiency. Supervised occupational therapy and attempts to meet individual problems growing out of long periods of enforced rest and limited activity are primary requisites in the management of these cases, if many of the unpleasant sequelae of chronic invalidism are to be avoided.

A small, but important number of patients may be expected to develop chronic liver disease following an unusually prolonged attack of infectious hepatitis. There are many conditioning factors which are believed to operate in the production of chronic liver insufficiency as a consequence of acute infectious hepatitis. Early recognition of the disease, prompt institution of treatment and careful supervision of the patient during convalescence are important factors which work against the development of chronic residual damage following this disease. There are doubtless other factors which condition complete recovery from hepatitis, but knowledge of them is lacking.

Jaundice may persist or reappear periodically in chronic hepatitis. Chronic hepatitis may develop into a latent stage in which symptoms abate and are no longer sufficiently marked to interfere with the patient's activity. On the other hand, chronic hepatitis may progress to a form of cirrhosis of the liver. There is considerable lack of agreement among pathologists regarding the type of cirrhosis that may result. In some cases the pathologic picture appears to be indistinguishable from that arising as a result of toxic necrosis of the liver. In other cases, emphasis has been placed on the appearance of portal scarring of wide extent. Cirrhosis following infectious hepatitis has many clinical features in common with that arising from other causes. It is frequently exceptionally grave. Hyperbilirubinemia may be marked or minimal. Hypoproteinemia may be extreme, and is often accompanied by extensive edema and ascites. Therapy at this point in the development of chronic liver insufficiency presents one of the most complex problems which the physician encounters. If treatment of chronic liver insufficiency is to be of maximal effectiveness, it should be begun long before this stage of the disease is established. Anorexia, loss of weight, together with laboratory signs of anemia, persistent bromsulfalein retention and reversal of the albumin-globulin ratio are signs in chronic hepatitis which frequently precede by months the development of the stage of cirrhosis characterized by edema and ascites.

Although several factors which have been found to be of importance in the therapy of acute hepatitis and hepatitis with delayed convalescence should be



(Not Restricted)

retained in the management of chronic hepatitis and cirrhosis, certain other procedures of a more specific nature need to be introduced. An adequate caloric intake is harder to assure in this stage of the disease, and frequent feedings of concentrated caloric value may be required. Parenteral supplements of glucose and protein hydrolysate should be employed only when all other efforts to secure an adequate caloric intake have failed. Considerable benefit may be derived from the parenteral administration of liver extract. Improvement may be reflected first in an increase in the patient's appetite and in his sense of well-being. In order to achieve maximal benefit from liver extract, it is believed that doses larger than those possible by the intramuscular route are required. An extract suitable for intravenous use has been developed at the Rockefeller Institute. Careful tests for sensitivity and tolerance to graded doses of the extract must be carried out before administration of the full intravenous dose is attempted. An intravenous test dose of 0.05 c.c. of crude extract, diluted to 1.0 c.c. with saline or glucose, is administered slowly. If no untoward effects are apparent in 15 minutes, it may be followed by 1.0 c.c. of the extract and 9.0 c.c. of diluent. If no reaction occurs with the larger dose, except perhaps for slight flushing of the patient, intravenous doses of 2.0 c.c. of extract and 18.0 c.c. of diluent, 5.0 c.c. of extract and 20.0 c.c. of diluent, and finally, 10.0 c.c. of extract and 40.0 c.c. of diluent, spaced at intervals of 24 hours, may be administered safely. For full effect, therapy with the full 10.0 c.c. dose of liver extract, administered from 2 to 3 times weekly should be continued for several months, or until no further improvement follows its use.

It is becoming increasingly evident that many of the severe symptoms observed in chronic liver insufficiency arise from inability of the liver to accomplish the proper metabolism of protein. Chronic hepatitis with liver insufficiency is almost invariably associated with marked quantitative and qualitative changes in the plasma proteins. The concentration of albumin in the blood is frequently lowered beyond the critical level required to maintain osmotic equilibrium between the blood and the fluid components of the tissues, so that marked edema and ascites result. In these cases the intravenous administration of human albumin, in sufficient amounts, may be associated with marked and immediate clinical improvement. Often there is complete relief of peripheral edema within a few days. This effect may be ushered in by copious and sustained diuresis. Ascites may diminish or disappear, although this may not occur if the pathological process in the liver is too far advanced. In order to achieve immediate and striking effect on fluid balance, it may be necessary to give from 50 to 100 grams of human albumin daily until a satisfactory level of plasma albumin is obtained. Thereafter, only occasional administration, in amounts of from 25 to 50 grams, may be required to keep the patient in positive nitrogen balance. During therapy with albumin, every effort should be made to insure an adequate intake of dietary protein in order to achieve



(Not Restricted)

maximal benefit of utilization of the albumin. If human albumin is not available, much can be accomplished through the use of human plasma in adequate amounts. For maximal effects, plasma should be given in amounts of from 500 to 750 c.c., two to three times weekly, for periods of several weeks. Best results appear to follow combined therapy with crude liver extract and human albumin.

In patients with hepatitis studied at the Rockefeller Hospital, no acceleration in recovery was obtained in a series of patients receiving supplements of methionine or choline in addition to a diet high in protein over that of a control series receiving the diet alone. There is some evidence that these substances may be beneficial in chronic hepatitis with insufficiency, although the work so far has been fragmentary and not well controlled.

Chronic liver insufficiency eventually takes on many of the characteristics of a multiple deficiency disease. The deficiency syndrome appears to arise in part from faulty dietary intake, but in the main from inability of the damaged liver to carry out in an adequate manner the intermediary metabolism of numerous constituents essential for the maintenance of body economy. In the treatment of chronic liver disease, therefore, it is well to stress the use of adjuvant therapy of the most diverse type rather than to rely exclusively on one promising agent. Any element which may be expected to relieve one or more of the metabolic defects arising in this complex syndrome should be included in therapy. Measures such as an adequate caloric intake, transfusions of blood, plasma and albumin, and the administration of crude liver extract, choline, the sulfur-amino acids and vitamins may contribute to some degree in raising the total metabolic efficiency of the chronically damaged liver. Diverse therapy of this type, if employed in time, may be effective in checking certain pathologic processes, which, if unchecked, lead ultimately to a state of irreversible hepatic insufficiency and death. (U.S.N. Res. Unit, Rockefeller Hosp., and Hosp. of the Rockefeller Inst. for M. Res. - Hoagland, Kunkel, Labby and Shank)

\* \* \* \* \*

(Not Restricted)

Demonstration of Etiological Agent of Infectious Hepatitis in Presymptomatic Period After Transfer by Transfusion: A patient, X, who had been injured, needed a blood transfusion which he received from Y. Two days later Y presented symptoms and icterus which were diagnosed as infectious hepatitis. His illness became progressively more severe, and after several days he died from what was considered to have been a naturally acquired infectious hepatitis.

Patient X, who subsequently developed hepatitis and recovered from it, was carefully watched and studied. By subcutaneous inoculation of human

(Not Restricted)

volunteers with blood serum from X, the infective agent was demonstrated in the serum of X the eighth day after receiving the transfusion. This was 3 days before the first symptoms and 13 days before the onset of jaundice. The infective agent was also demonstrated in another specimen of serum taken 6 days later, or 3 days after first symptoms.

The incubation period as measured by the onset of jaundice in the 4 volunteer subjects who developed definite illness was from 42 to 47 days, while the clinical response varied greatly in severity. (Proc. Soc. Exper. Biol. and Med., March '46 - Francis et al.)

\* \* \* \* \*

Experiment on Control of Spread of Infectious Hepatitis via Water: At a recent meeting of the Committee on Sanitation of the National Research Council, Major Baty reported on the latest study concerning the possibility of controlling the causative agent of hepatitis through water treatment, including chlorination.

In the experiment started 16 November 1945, twenty volunteers were divided into three groups, a control group of six men and two test groups of seven men each. The control group drank water which had been inoculated with the infectious agent, then thoroughly mixed, and allowed to stand for 24 hours without any other subsequent treatment. A second group was given infected water which, after standing twenty-four hours, was coagulated with two grains of soda ash and four grains of alum per gallon, and then after settling for one hour was decanted and filtered through a model diatomite filter. A third group was given infected water pretreated and filtered as above and then chlorinated at 3.25 p.p.m. through the use of a hypochlorite solution. At the end of a thirty-minute contact period, duplicate tests showed the residual chlorine content to be 2.0 p.p.m., as measured by the acid starch - potassium iodide method and by titration with sodium thiosulfate. The ortho-tolidine arsenite test showed approximately 1.5 p.p.m. total residual chlorine and from 0.4 to 0.45 free available chlorine. The specimen was then completely de-chlorinated with sodium sulfite. The full actual chlorine contact period was thus thirty-six minutes.

Five of the six men in the control group presented evidences of hepatitis at the end of the normal incubation period of from twenty-one to twenty-three days. Four of them displayed symptoms of jaundice.

Among the seven men in the second group, three cases of hepatitis developed, all with jaundice, the first case appearing one week after the development of the last case in the control group.



There were no cases of hepatitis or jaundice among the seven men in the third group who drank the filtered and chlorinated water. Although the incubation period may be increased as the concentration of virus decreases, sufficient time appears to have elapsed for the remaining men in the second group and all in the third group to have come down with hepatitis if they were likely to do so as a result of this exposure. (Meet., NRC Committee on Sanitary Engineering )

\* \* \* \* \*

(Not Restricted)

Penicillin in Ocular Infections: In a recent presentation before the New England Ophthalmological Society, Dr. Edwin B. Dunphy pointed out the following:

Penicillin in the treatment of ocular infections is usually superior to the sulfonamides for the following reasons:

- (1) It is generally nontoxic by all routes of administration.
- (2) Its antibacterial action is not inhibited by autolytic products and secretions.
- (3) It has little if any deleterious effects on the regeneration of corneal epithelium.
- (4) It is not incompatible with other drugs commonly used, such as atropine, cocaine, procaine, sulfadiazine, etc.

With these advantages it should be the drug of choice in treating any ocular infection known to be due to penicillin-sensitive organisms.

However, unless certain basic facts are understood regarding its distribution in the ocular tissues by various methods of administration, many cases will not be treated effectively and much valuable time will be lost before the ocular infection can be brought under control.

The weight of experimental evidence seems to indicate the following recommendations for treating eyes infected with penicillin-sensitive organisms:

- (1) Intramuscular and intravenous injections of penicillin will probably have little effect in controlling infections of the anterior and vitreous chambers.
- (2) Sub-conjunctival injections may have some effect on infections of the anterior chamber, but are probably worthless in infections of the vitreous.
- (3) Infections of the vitreous chamber can probably be most effectively treated by a single intravitreal injection of 0.1 c.c. of penicillin solution containing not more than 500 units.
- (4) Infections of the anterior chamber will probably be controlled by local

(Not Restricted)

application of saturated cotton packs or by iontophoresis. Corneal bath and sub-conjunctival injection will probably be less effective. In cases of perforating corneal injury with damage to the lens, a single injection of 0.1 c.c. of a solution of penicillin containing not more than 500 units may be justified.

(5) For conjunctivitis and infected corneal ulcers, frequent instillations of penicillin drops or ointment will probably be effective. Saturated cotton packs under the lids, iontophoresis or corneal bath should be tried in very severe cases. (Massachusetts Eye and Ear Infirmary)

\* \* \* \* \*

(Not Restricted)

Absorption, Distribution and Excretion of Streptomycin: The present studies were undertaken to determine the absorption, distribution and excretion of streptomycin when given by various routes, and to provide an understanding of the problems associated with use of the drug. Twenty-five experiments were carried out on 21 subjects who were given single doses of streptomycin. The subjects included were patients and a few normal volunteers. There was no clinical evidence of impaired renal function in any one of these persons.

Oral doses of 400,000 and 500,000 micrograms failed to give rise to any demonstrable level in the serum, and none or only traces appeared in the urine. Streptomycin in the stool after oral administration was highly concentrated. This indicates poor absorption rather than massive destruction or inactivation within the gastro-intestinal tract.

The inhalation of streptomycin also failed to give rise to any appreciable level in the serum, and only small amounts appeared in the urine.

In every instance in which a subject was given streptomycin parenterally it was possible to demonstrate the presence of the material in the serum, and the serum levels obtained were roughly proportional to the amount injected. When the dose was 200,000 micrograms or more, demonstrable amounts remained in the serum for twelve hours in virtually all subjects. As had been anticipated, the initial concentration in the serum was considerably higher after intravenous than after intramuscular injection. In spite of significant initial differences, the serum levels were approximately the same at the end of two hours regardless of the route of parenteral administration.

Streptomycin appeared in significant concentrations in the spinal fluid of 3 subjects with meningitis and in the pleural fluid of 2 subjects with pleural effusions. In 2 subjects, streptomycin was demonstrated in the bile. In the few studies reported here, it would seem that the presence of an inflammatory reaction in the meninges increases the diffusion of streptomycin into the spinal



(Not Restricted)

fluid. Before the therapeutic implications of these observations are clear, these data will require further elaboration.

A study on the distribution of streptomycin in various organs obtained post mortem showed that it was present in the kidney in high concentration. Smaller amounts were found in the lung and in heart muscle, while both the brain and the liver contained virtually none.

The rate of urinary excretion was greatest during the first two hours of observation at the time of highest serum levels. On the average, a larger percentage of the dose was excreted in the first two hours after intravenous, than after intramuscular or subcutaneous dosage, but there was considerable overlap in individual cases. For the patients receiving streptomycin parenterally, the total excretion in twelve hours varied from 41 to 86 per cent of the dose, with a mean of 65 per cent. The urine excreted between twelve and twenty-four hours after the injection usually contained only small additional amounts, varying from traces to 9 per cent of the dose. This suggests that some of the material may be destroyed or inactivated within the body or in the urine itself. It seems unlikely that the amounts of streptomycin appearing in the bile could account for the discrepancy between the dosage and the urinary excretion. Plasma clearance values ranged from 38 to 67 c.c. of plasma cleared of streptomycin per minute. The low plasma clearance values obtained for streptomycin explain its presence in the serum for as long as twelve hours following parenteral administration. It seems likely, however, that the high blood levels required in the treatment of infections will necessitate frequent injections or continuous infusions in order that therapeutic levels may be maintained.

The results reported here are in essential agreement with those of Reimann et al. (Arch. Int. Med., Feb. '46 - Adcock-Hettig)

\* \* \* \* \*

Varying Toxicity of Streptomycin: In order to determine whether the great differences in toxicity between various batches of streptomycin might be due to a histamine-like factor or to another impurity (or impurities) unrelated to streptomycin itself, subcutaneous and intravenous tests were performed in 2 groups of mice. The material used consisted of 6 highly purified samples with potencies ranging from 670 to 800 micrograms of streptomycin base per mg. of solids and of 7 less purified samples with potencies ranging from 200 to 320 micrograms of streptomycin base per mg. of solids.

Even the most highly purified samples varied as much as 100 per cent in their intravenous and subcutaneous toxicities. Of interest is the fact that

the ratio of intravenous and subcutaneous toxicity of highly purified samples remained relatively constant (from 1:4 to 1:5), whereas with lower potency material the ratio varied from 1:4 to 1:10. It is assumed that the latter difference is due to a greater variation in the rate of absorption of the less purified materials. While the rate of absorption from the subcutaneous tissues can explain in part the potency, the factor of absorption cannot account for the difference observed after intravenous administration. Treatment of samples containing the histamine-like impurity with histaminase resulted in a loss of their depressor activity, but had no influence upon their subcutaneous or intravenous toxicity. Since a variation of 100 per cent existed in the intravenous toxicity between the least and most toxic of the highly purified samples, the presence of an impurity (or impurities) in streptomycin, other than the histamine-like factor, is postulated. (OEMcmr-544, Molitor, Merck Inst. for Therapeutic Research - CMR Bulletin #75)

\* \* \* \* \*

(Not Restricted)

Measles Treatment with Immune Serum Globulin: During the current widespread incidence of measles, it is considered desirable to review the pertinent information regarding prophylaxis against measles, using Navy Medical Department Supply Catalog items.

As a result of its Plasma Fractionation Program, the Navy has acquired large stocks of Immune Serum Globulin which is the gamma globulin fraction of pooled normal adult human plasma concentrated about 25 times. Most of the antibodies present in adult plasma occur in this Fraction. One of the most potent of these antibodies is the one against measles which results from the widespread incidence of measles in childhood. It has been shown by numerous investigators, especially Janeway, IAMA, 126:674, 11-11 '44; Ordman et al., Journal of Clinical Investigation, 23:541, July '44; Stokes, et al., Journal of Clinical Investigation, 23:531, July '44; and Greenberg, et al., IAMA, 126:944, 12-9-44, that this preparation in small doses is probably the most effective agent yet used in the prevention or modification of measles.

Immune Serum Globulin is to be distinguished from Immune Globulin which is sold on the open market by about ten pharmaceutical houses and is prepared from human placentas. Immune Serum Globulin, as issued in the Navy, gives equal if not better protection than the placental globulin according to the investigators listed above and in addition causes almost no reactions.

Dosage: Immune Serum Globulin is given intramuscularly preferably in the buttock within the first six days after initial exposure. Some effect may be obtained with larger doses even up to the tenth day. It is not used intravenously.



(Not Restricted)

If complete prevention of measles is desired, children under six years old should receive 1.5-2.0 c.c. and those over six, 5.0-7.0 c.c. This provides only temporary passive immunity. Ideally a small dose should be given which is just large enough to modify but not prevent the measles, thereby providing a mild illness but a lasting immunity. Dosage in those cases varies from 0.5-1.0 c.c. for those under six to 2.0-3.5 c.c. for those over six years old.

It is doubtful whether Immune Serum Globulin is of any value in treatment after measles has developed. Large doses (5-30 c.c.) intramuscularly may modify the course of the disease if given before the appearance of the rash or Klopik spots.

Immune Serum Globulin is available as a Supply Table Item from the Brooklyn or Oakland Naval Medical Supply Depot as Globulin, Immune Serum (Human), in a 5 c.c. size (S1-1090), and a 10 c.c. size (S-1025). (NavMed School, N.N.M.C. - Gibson)

\* \* \* \* \*

(Not Restricted)

The Role of Blood and Blood Derivatives in Homologous Serum Hepatitis:

The therapeutic value of human plasma in the treatment of acute deficiencies of the circulating blood volume and the hypoproteinemias is well established. The frequent occurrence of spectacularly beneficial results, the usual absence of harmful reactions and the ease of administration have caused many physicians erroneously to regard plasma as a totally innocuous therapeutic agent.

The dissemination of the etiological agent of homologous serum hepatitis by the administration of human plasma, serum and whole blood has been adequately demonstrated. The over-all incidence of hepatitis following the administration of plasma is well under 2 per cent; however, a very high incidence may be expected in any group of persons who have received plasma, serum or whole blood containing the infective agent of homologous serum hepatitis.

Plasma or serum is usually prepared by pooling the plasma or serum obtained from 8 to 50 blood donors, and later dispensed in from 250 c.c. to 500 c.c. amounts. Thus, the blood of one donor containing the infective agent will infect the entire pool, consisting of from 8 to possibly 50 bottles. As many as 50 recipients may thus be exposed to the dangers of homologous serum hepatitis if the blood of one donor contained the infective agent at the time of collection. It has been demonstrated that the subcutaneous injection of as little as 0.02 c.c. of such plasma is as effective in transmitting the infective agent as a full intravenous infusion of plasma.

(Not Restricted)

The incubation period of hepatitis resulting from the administration of whole blood, plasma or serum containing the infective agent may be from 30 to 180 days. Because of this, individuals who develop hepatitis often do not come under the observation of the medical officer who administered the blood, plasma or serum, thus obscuring the correlation between the administration of the material bearing the infection and the appearance of the hepatitis.

There is no danger of any widespread dissemination of the infective agent of serum hepatitis from the use of whole blood because it is usually not pooled, and any particular blood donation is usually given to only one patient. In order to safeguard as much as possible against transmitting the infection to groups of persons or to single individuals, hospitals operating blood banks should be painstaking in the selection of donors irrespective of whether the blood is to be used as whole blood or plasma. Blood donors should not be accepted if they have received plasma, whole blood or convalescent serum during the past 8 months or if they give a history of having had jaundice within the past year.

Human serum albumin as prepared for the Navy since September 1945 is believed to be free from the danger of transmitting the agent of homologous serum hepatitis because of the fractionation process and the fact that it is heated for 10 hours at 60° C., which is sufficient to kill the infective agent. Serum albumin prepared prior to September 1945 was fractionated by the low temperature (below 0° C.) and alcohol method, and the majority of the material was heated to 50° C. for varying lengths of time up to 3 weeks. Six-month follow-ups on 77 patients receiving 1214 bottles of this normal human serum albumin prepared prior to September 1945 representing samples from approximately 910,000 donors failed to reveal any case of hepatitis transmission. It is therefore considered that human serum albumin prepared prior to September 1945 is also free from any appreciable danger of transmitting the agent of hepatitis.

The facts presented in no way detract from the usefulness of plasma when its therapeutic use is clearly indicated. It is, however, strongly urged that the advantages expected to ensue from the use of plasma be weighed carefully against the possible dangers of the transmission of serum hepatitis. When whole blood, human serum albumin, amino acids or crystalloids given intravenously, or amino acids and whole protein given by mouth can be used satisfactorily in place of plasma, they should be given preference.

The use of human plasma or human serum as control injections or as a diluent or vehicle for other subcutaneous, intravenous or intramuscular medication cannot be too strongly condemned. In view of the availability of Immune Serum Globulin (Medical Supply Table Item S1-1025) pooled convalescent human serum should not be used. (Professional Div., BuMed, and NavMed School, NNMC)



(Not Restricted)

Abstracts of Reports on Research Projects: (Full reports are available upon request.)

X-109G      Report on Original Model and Modification of the Ellis Flotation Stretcher.

The Ellis flotation stretcher is made of heavy canvas, has wooden strips inserted into the bottom for rigidity and straps for securing the patient to the litter. A waterproof cover with a hood envelops the entire assembly. A kapok life jacket is secured to the inside of the litter.

In the modification, several features of the original design were employed. A waterproof cover was devised to protect litter patients from adverse weather conditions, such as rain, snow and cold, and exposure due to immersion. This cover is similar to a sleeping bag and is so constructed that it can be used in combination with either the Stokes litter, pole litter or nonrigid litter, the patient being carried by means of straps on the underside. The modifications effect a major saving in weight and employ a more durable cloth and the substitution of a zipper which proves superior to the grooved rubber closure. No effort was made to incorporate flotation since flotation is not always necessary and because flotation for litters has been developed to the point where it can be attached as the occasion demands. (Nav. Med. Res. Inst., N.N.M.C.)

X-222      Studies in Tsutsugamushi Diseases (Scrub Typhus) - The Effect of Methylthionine Chloride (Methylene Blue) on Tsutsugamushi Disease in Man.

Given by mouth, methylthionine chloride is not a useful therapeutic agent for the treatment of scrub typhus in man as it is in mice. This may be because man tolerates only one-tenth the daily effective dose for mice calculated on a weight basis. Vomiting and diarrhea preclude the use of larger doses.

Given intravenously, methylthionine chloride appears to be partially successful in treating the disease in man. The rapid destruction of red blood cells following intravenous administration of the drug limits its usefulness. Gastro-intestinal disturbances do not occur following this mode of administration.

(Not Restricted)

X-222  
(Cont.)

Methylnionine chloride, like other relatively toxic drugs, can be given intravenously if it is given slowly in dilute solutions (0.1 per cent).

Evaluation of the therapeutic agent in scrub typhus is difficult because the disease is extremely variable as to mortality and course. There is no essential difference between the clinical characteristics of the illness in Burma or India and in the Southwest Pacific Islands.

A rickettsial pneumonitis with a superimposed bronchopneumonia appears to be the most common cause of death. (Nav. Med. Res. Inst., N.N.M.C.)

X-539

The Effect of Splenectomy on Avian Malarial Infections.

Removal of the spleens of chicks prior to infection with either Plasmodium lophurae or Plasmodium gallinaceum had no effect on the course of the parasitemia.

Splenectomy of chicks with latent infections of P. lophurae did not produce relapse, but removal of the spleen from chicks with latent infections of P. gallinaceum resulted in increased parasitemias of varying degrees.

Chicks splenectomized prior to infection or during latency were able to resist superinfection with the same strain of parasite as effectively as nonsplenectomized animals.

It is evident, therefore, that the spleen has little significance in determining the initial reactions of the host to the parasite. It would appear, however, that once an immunity has been established, the characteristics of the parasite determine its importance to the maintenance of this immunity. (Nav. Med. Res. Inst., N.N.M.C.)

X-581

A Study of Aptitude in Learning the Japanese Language.

A study was made to develop a battery of tests for predicting success in learning the Japanese language. It was found that those tests which best differentiated potential graduates from failures were tests of verbal, rather than mechanical or mathematical proficiency. (Medical Field Res. Lab., Camp Lejeune, N.C.)



(Not Restricted)

Application Form for Further Training in the Medical Corps of the Navy:

The outline of the Graduate Training Program in the Navy has been published, and NavMed 762, "Essentials of Internship and of Residency-Type Training in the United States Naval Hospitals" is being revised. In order to furnish additional information regarding the form of application for further training, it is necessary to review certain facts which should be brought to the attention of every medical officer.

The Bureau of Medicine and Surgery cannot certify any medical officer. Certification of a medical officer is the responsibility of a specialty board and is a by-product of the training program. A hospital is not approved, but rather specialty training within that hospital is approved.

Before submitting a request for training in the Navy, the applicant should:

- (a) Familiarize himself with the requirements of the particular specialty board.
- (b) Compare his professional attainments with (a).
- (c) Determine how much more training he requires.
- (d) Determine whether or not any additional training he may require is available at a Naval Medical Facility.

After following the above procedure a medical officer will thus be able to submit more intelligently and reasonably his application for further training. Names of specialties for training should coincide exactly with the names used by the specialty boards. The applicant's request should be specific and definite, and not leave the decision of his future specialty up to the Bureau. For example: Requests for training in "Medicine and Surgery" are inappropriate, as are requests for training in "Obstetrics and Pathology."

In the application paragraph (1) should state the subject of the training requested and the location if applicable.

Paragraph (2) should include a statement as to previous training and experience in this and allied subjects. This paragraph should also include a statement as to the applicant's ability to stand a surgical watch, a medical watch, an E.E.N.T. watch, an x-ray watch, or any specialty watch, if such information is applicable.

Paragraph (3) should state the desires or aims of the officer and the reasons why this request is made.

(Not Restricted)

Paragraph (4), if necessary, may include any other facts which might be of interest to the Advisory Board in making selections for further training.

The last paragraph should include a statement, if applicable, regarding an agreement to remain in the Navy for the necessary time after completion of the desired training. Recipients of residency-type training in the Navy are expected to remain in the Navy for a period of a year after completion of each year of training or three years after the completion of training which qualifies the recipient to be examined by a specialty board. Medical Officers receiving courses of six months or longer in an accredited civilian institution are likewise expected to remain in the Navy for three years after completion of such courses.

Commanding Officers are advised to include in a forwarding endorsement such information as will be of help to the Advisory Board in making recommendations to the Surgeon General. Such endorsements should give an honest and frank opinion as to the applicant's professional qualifications and future potentialities. (Professional Div., BuMed)

\* \* \* \* \*

(Not Restricted)

Refresher Course at U. S. Naval Medical School: It is contemplated that the next class at the Naval Medical School, Bethesda, Maryland, will convene on or about 2 September 1946. This is the second basic "refresher course" of 5 months' duration since the war. The course includes such subjects as atmospheric hygiene, medicine, neuropsychiatry, pathology, surgery, tropical medicine and other medical specialties. This course is open only to officers of the regular Navy. Requests for this course of instruction should be addressed to Chief of the Bureau of Medicine and Surgery, Navy Department, Washington, D. C. (Professional Div., BuMed)

\* \* \* \* \*

(Not Restricted)

Army Industrial College: Change of Name. The Army Industrial College has been redesignated "The Industrial College of the Armed Forces" as of 11 April 1946 by the Under Secretary of War and the Assistant Secretary of the Navy.

Brigadier General Donald Armstrong, United States Army, has been designated as Commandant of The Industrial College of the Armed Forces, and Captain E. R. Henning, United States Navy, and Colonel Robert W. Brown, United States Army, have been designated as Assistant Commandants.

\* \* \* \* \*



(Not Restricted)

Public Health Foreign Reports:

| <u>Disease</u>  | <u>Place</u>  | <u>Date</u>                       | <u>No. of Cases</u> |
|-----------------|---|-----------------------------------|---------------------|
| Cholera         | China, Canton   | March 1-26, '46                   | 11                  |
|                 | India, Calcutta   | Feb. 23-March 9, '46              | 117 (61 fatal)      |
|                 | Philippine Islands,<br>Negros Province                      | Nov. 25-Dec. 15, '45              | 1 (1 fatal)         |
| Plague          | China, Fukien Province                                      | March 1-26, '46                   | 4                   |
|                 | Manchuria, Liaopoh<br>Province, Szepingkai                  | March 7 & 8, '46                  | 5 (fatal)           |
|                 | Peru, Lima Dept.  | January '46                       | 11 (2 fatal)        |
| Smallpox        | Brazil, Maranhao State<br>San Luiz                          | March 19, '46<br>(date of report) | 30 a day*           |
|                 | British E. Africa<br>Tanganyika                             | Feb. 16-23, '46                   | 700 (98 fatal)      |
|                 | Japan   | Jan. 12-19, '46                   | 334                 |
|                 | Mexico  | January '46                       | 77                  |
|                 | Morocco (French)  | Feb. 21-March 10, '46             | 304                 |
|                 | Venezuela   | February '46                      | 159                 |
|                 |   |                                   |                     |
| Typhus<br>Fever | Belgian Congo   | Feb. 16-March 2, '46              | 241                 |
|                 | Ecuador   | February '46                      | 63 (2 fatal)        |
|                 | Egypt   | Feb. 9-23, '46                    | 198 (11 fatal)      |
|                 | Eritrea   | Feb. 23-March 2, '46              | 26                  |
|                 | Guatemala   | January '46                       | 76 (13 fatal)       |
|                 | Japan   | Dec. 29-Jan. 5, '46               | 86                  |
|                 |   | Jan. 12-19, '46                   | 5                   |
|                 | Mexico  | January '46                       | 92                  |
|                 | Morocco (French)  | Feb. 21-March 10, '46             | 393                 |
|                 | Turkey  | March 2-16, '46                   | 165                 |
| Yellow<br>Fever | Venezuela, Trujillo<br>State, Escuque District,<br>Boqueron | March 6, '46                      | 1                   |

(Pub. Health Foreign Reps., April 5, 12 &amp; 19, '46)

\*No reliable figures are available but it is said that not more than 30 cases occurred on any one day.

Circular Letter 46-75

7 May 1946

(Not Restricted)

To: All Ships and Stations.

Subj: Medical Records of American Red Cross Personnel.

Ref: (a) Paragraph 4153.2, Manual of the Medical Department, 1945 Edition.

(b) BuMed Circular Letter 45-75, 17 Mar 1945.

1. When American Red Cross personnel are furnished medical attention or are hospitalized at Naval Medical Department activities as authorized by references (a) and (b), their medical records, including all clinical records and X-ray films, should be forwarded to the Medical Director, National Headquarters, American Red Cross, 18th & D Streets, N.W., Washington, D. C.

2. The following sentence should be added to reference (a):

“Upon completion of treatment their medical records, including all clinical records and X-ray films, should be forwarded to the Medical Director, National Headquarters, American Red Cross, 18th & D Streets, N.W., Washington, D. C.”

--BuMed. Ross T. McIntire.

\* \* \* \* \*

Circular Letter 46-76 (See page 44).

\* \* \* \* \*

Circular Letter 46-77

10 May 1946

(Not Restricted)

To: All Ships and Stations.

Subj: Marital Contacts of Navy and Marine Corps Venereal Disease Patients, reporting of.

Refs: (a) Par 12B6.2; Manual of the Medical Department.

(b) Par 5120, Manual of the Medical Department.

(c) Venereal Disease Contact Report, NavMed 171.

1. References (a) and (c) are hereby modified to permit the use of routine venereal disease contact reporting procedures for investigation of marital



(Not Restricted)

contacts of Navy and Marine Corps venereal disease patients, where all other practicable methods of handling and completing the investigation within the Naval Service, by private physician, or clinic of contact's choice, have been exhausted.

2. NavMed 171 shall be completed in all instances where marital contacts are named. Copy C shall be forwarded according to existing instructions, indicating under remarks how the investigation of marital contacts is being handled. Copy B with results of investigation shall be similarly forwarded. Copies A and D shall be destroyed and Copy E retained for files. Prompt investigation and forwarding of results are imperative.

3. When other methods of investigation are unsuccessful only then shall the marital contact report be forwarded according to routine procedures, at the same time advising the patient of action taken.

4. It shall be the responsibility of the Medical Officer of the reporting activity to handle the investigation of all reported marital contacts, as directed, accruing completion if at all possible within the Naval Service (dependents' dispensary), private physician or clinic of contact's choice.

5. Every married patient with venereal disease shall be fully informed of the dangers and implications of venereal infection to himself, his spouse, and his family, advising him of the urgent necessity of investigating all contacts, with the aim of safeguarding the physical and mental health of the family, of protecting the public health, and of preventing possible familial infection.

6. Paragraph 12B6.2, Manual of the Medical Department (ref (a)) is modified as follows:

Delete last sentence, "No report shall be made with regard to the families of naval personnel." and substitute, "Reports shall be made with regard to the families of naval personnel only when other methods of investigation are unsuccessful. The patient shall be advised of the action taken."

--BuMed. Ross T. McIntire.

\* \* \* \* \*

Circular Letter 46-78

11 May 1946

(Not Restricted)

To: Comdts., NDs and River Commands.

Subj: Photofluorographic Units, Request for Recommendation for the Assignment of.



(Not Restricted)

Ref: (a) BuMed Circ Ltr P3-3/P3-1(054-40), 4 Jan 1945, (N.D. Bull., Item 45-83).

Encl: 1. (HW) Photofluorographic Unit Standard Layout, BUMED 4/14/44.

1. It is requested that addressees make recommendations to this Bureau at the earliest date possible concerning the locations to which photofluorographic units might be assigned after 1 Sep 1946, in order to carry out the provisions of ref (a) in an economical manner.

2. In arriving at recommendations in regard to the utilization of equipment it will be necessary to consider the interests of:

- (a) Forces within continental limits;
- (b) Forces afloat;
- (c) Forces ashore outside continental limits.

3. In regard to 2 (a), only those large stations which undergo large turnover in short periods of time should be recommended for installation of stationary photofluorographic units. Mobile Photofluorographic Units will be available for the annual examination of the officer and enlisted personnel of those Continental Stations which have no access to stationary photofluorographic equipment. Training Centers, Receiving Stations, Naval Shipyards, and Naval Hospitals designated as Teaching Centers, should have stationary units in sufficient number to provide for their needs. Each stationary unit can conveniently examine 500 to 750 personnel daily. Each unit should be so placed that it will be readily available not only to the personnel of the station but also to the personnel of nearby stations. Due consideration should be given to locating equipment in Naval Shipyards so that it will be readily available to the crews of Naval vessels.

4. In regard to 2 (b), provision should be made for serving the various fleets when they return to their bases for supply or repair. In view of the great volume of examinations that may be required on such occasions more than one unit may be needed at certain locations. In such instances adequate housing must be provided.

5. In regard to 2 (c), stationary photofluorographic equipment should be recommended only for those major overseas stations which can be expected to examine large numbers of permanently assigned personnel, since it is considered that personnel assigned to overseas stations generally will receive the required examination of the chest before reporting to and upon return from

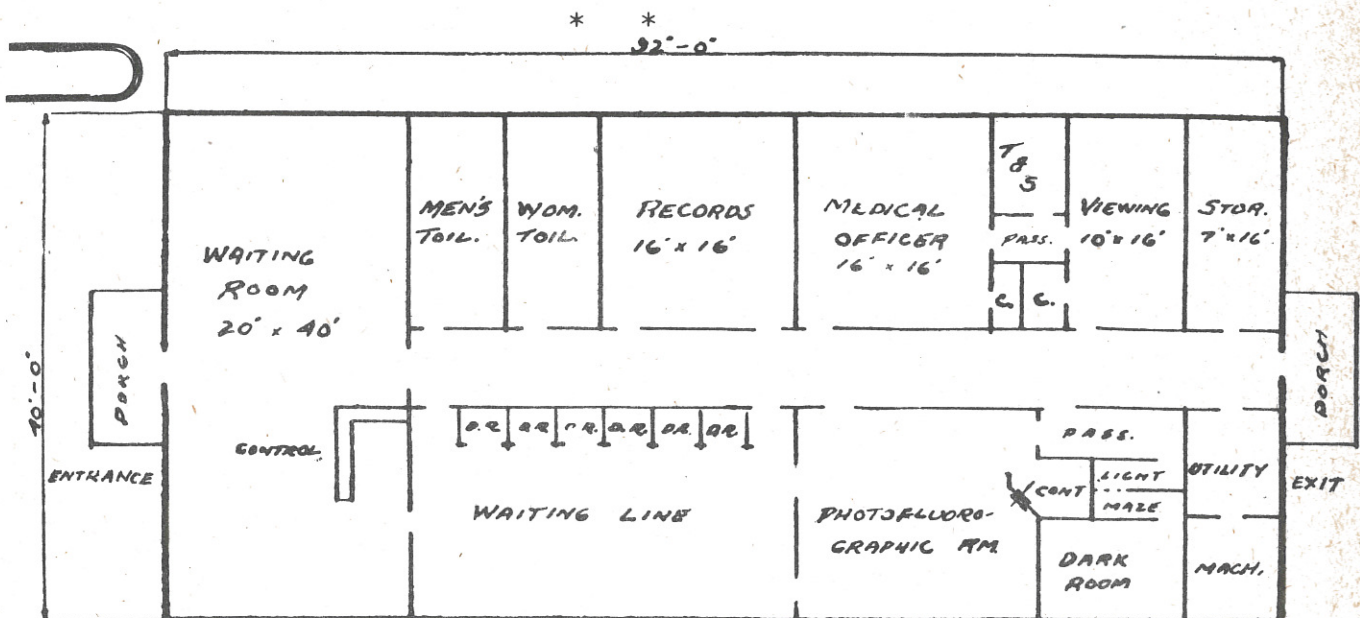


(Not Restricted)

such stations.. When recommending major overseas bases for the installation of photofluorographic equipment, the number of personnel to be examined monthly should be stated and due consideration should be given to the electrical supply available (in general, 220 volt, single phase, 60 cycle, alternating current will be required).

6. Enclosed herewith is a diagrammatic sketch which may be used as a guide in the selection of housing for a photofluorographic unit.

--BuMed. Ross T. McIntire.



Standard Floor Plan for Photofluorographic Unit  
Scale 1/16" = 1 ft.

\* \* \* \* \*

Circular Letter 46-79

13 May 1946

(Not Restricted)

To: All Ships and Stations.

Subj: Standard Unit Prices on Items of Medical Supplies and Equipment by all Naval Medical Department Activities, Adoption of.

Ref: (a) AlNav 147, dated 29 March 1946.

Encl: 1. (HW) Instructions for accounting procedures for adoption of standard unit prices.

1. Reference (a) promulgated information to all Naval activities relative to the

(Not Restricted)

issue and adoption of the Bureau of Medicine and Surgery Section of the Catalog of Navy Material to become effective 1 July 1946. To implement a system of standard unit pricing throughout the Medical Department of the Navy, standard unit prices for items of supplies and equipment have been adopted and will be issued as Standard Price Supplements which will be prepared for each class of the BuMed Section. The Standard Price Supplements are not available for the initial distribution of the BuMed Section of the catalog but will be ready for distribution shortly after the effective date, 1 July 1946.

2. Instructions governing accounting procedures to be employed in the adoption of a standard unit price for items of medical stores by hospitals and other activities is enclosed herewith for information. These instructions will not be published as a part of Standard Price Supplements.

3. Upon receipt of the Standard Price Supplement or changes thereto, all Medical Department activities shall take immediate action to adopt standard prices and adjust general ledgers as rapidly and expeditiously as possible, in order that the effective date for making accounting adjustments and reporting to BuMed may be identical for all activities. Accounting procedures outlined in enclosure involving adjustments required by the initial issue of the Supplement shall be effected as of 1 September 1946 by all activities. Interim changes shall specify the effective date of the change.

-BuMed. Ross T. McIntire.

\* \*

Enclosure 1

ACCOUNTING PROCEDURES FOR STANDARD UNIT  
PRICING OF NAVY MEDICAL SUPPLY CATALOG

Ref: (a) Paragraphs 3072, 3100(e), and 3149 (Chapter 20 of 1938 edition)  
Manual of the Medical Department.

1. Standard unit prices for items of medical supplies and equipment listed in the BuMed Section of the Catalog of Navy Material are hereby established for use of the Naval establishment and are based on actual cost to the Navy, present market prices and price trend. Standard price list for each class will be prepared and published as a Standard Price Supplement to the BuMed Section by the Catalog Branch, Army-Navy Medical Procurement Office, New York, New York. Regular changes in the Standard Price Supplement will be published annually by Army-Navy Medical Procurement Office in sufficient time to be effective in all field activities on July 1 of each year. Interim changes will be



(Not Restricted)

held to a minimum and made only when dictated by a major fluctuation in price. Interim changes will specify an effective date of the change which shall in all cases be the first day of a month. All changes will be issued in sufficient time to ensure that the change will be made by all field activities including Medical Supply Depots and Storehouses on the same date.

2. All receipts and expenditures of supplies and equipment for which no standard unit price has been adopted will be handled in accordance with current instructions.

3. Accounting Procedure for Adoption of Standard Unit Prices.

As of the effective date specified in each Standard Price Supplement, the following procedures will be taken to adopt the new standard prices:

A. HOSPITALS

- (1) Determine the money value of the book inventory of each item of Medical Supply Catalog supplies and equipment on hand at current unit price, as shown in the respective property ledgers.
- (2) Determine the money value of the book inventory of each item of Medical Supply Catalog supplies and equipment on hand at standard unit price.

SUPPLIES

- (3) Prepare a General Ledger Adjustment Voucher listing for each item of Medical Supply Catalog supplies affected: (a) the current unit price; (b) the revised unit price; (c) the money value of the book inventory of each item on hand at current price; (d) the money value of the book inventory of each item on hand at the revised unit price; (e) the total increase in book value of each item due to price adjustment; or (f) the total decrease in book value of each item due to price adjustment. Medical Supply Catalog stock numbers only are sufficient to identify the items on the adjustment voucher and will provide sufficient space on the form for the data prescribed above.
- (4) Record the General Ledger Adjustment Voucher for supplies in the books of account as follows:
  - (a) If the value of book inventory at standard unit price is greater then the book value at current unit price:

(Not Restricted)

General Ledger Journal Entry:

Dr. a/c 4 - Stores (Difference between value of book inventory at standard unit price and value at current unit price).

Cr. a/c 13 - Navy as a Whole  
(Difference between value of book inventory at standard unit price and value at current unit price).

Expense Analysis Register Entry:

Cr. a/c E 307 - Transfers, Surveys and Inventory Adjustments, Unissued Property. (Record the difference between the value of the book inventory at standard unit price and the value at current unit price as a credit (red) in column 03, Supplies and Materials).

Supplies Ledger:

Adjust the individual item sheets and the control sheets by taking up as a receipt by price adjustment the difference between the value of book inventory at standard unit price and the value at current unit price.

(b) If the value of book inventory at standard unit price is less than the value at current unit prices.

General Ledger Journal Entry:

Dr. a/c 13 - Navy as a Whole  
(Difference between the value of book inventory at standard unit price and the value at current unit price).

Cr. a/c 4 - Stores (Difference between the value of book inventory at standard unit price and the value at current unit price).

Expense Analysis Register Entry:

Dr. a/c E 307 - Transfers, Surveys and Inventory Adjustments,



(Not Restricted)

Unissued Property. (Record the difference between the value of book inventory at standard unit price and the value at current unit price as an expenditure (black) in column 03, Supplies and Materials).

Supplies Ledger:

Adjust the individual item sheets and control sheets by recording as an expenditure by unit price adjustment the difference between the value of the book inventory at standard unit price and the value at current unit price.

EQUIPMENT

- (5) Prepare a General Ledger Adjustment Voucher listing for each item of Medical Supply Catalog equipment affected: (a) the current unit price; (b) the revised unit price; (c) the money value of the book inventory of each item on hand at current unit price; (d) the money value of the book inventory of each item on hand at revised unit price; (e) the total increase in book value of each item due to price adjustment. or (f) the total decrease in value of each item due to price adjustment. Medical Supply Catalog stock numbers only are sufficient to identify the items on the adjustment voucher and will provide sufficient space on the form for data prescribed above.
- (6) Record the General Ledger Adjustment Voucher for equipment in the books of account as follows:
  - (a) If the value of book inventory at standard unit price is greater than value at current unit price:

General Ledger Journal Entry:

Dr. a/c 3 - Equipment (Difference between the value of book inventory at standard unit price and the value at current unit price).

Cr. a/c 13 - Navy as a Whole  
(Difference between the value of book inventory at standard unit price and the value at current unit price).

(Not Restricted)

Expense Analysis Register Entry:

Cr. a/c E 307 - Transfers, Surveys, and Inventory Adjustments, Unissued Property. (Record the difference between the value of book inventory at standard price and the value at current unit price as a credit (red) in column 08, Furniture, Furnishings and Equipment Issued.

Equipment Ledger:

Adjust the individual item sheets and control sheets by taking up as a receipt by price adjustment the difference between the value of the items at standard unit price and the value at current unit price.

(b) If the value of the book inventory at standard unit price is less than value at current unit price.

General Ledger Journal Entry:

Dr. a/c 13 - Navy as a Whole  
(Difference between the value of book inventory at standard unit price and the value at current unit price).  
Cr. a/c 3 - Equipment (Difference between the value of book inventory at standard unit price and the value at current unit price).

Expense Analysis Register Entry:

Dr. a/c E - 307 - Transfers, Surveys and Inventory Adjustment, Unissued Property. (Record the difference between the value of book inventory at standard unit price and the value at current unit price as an expenditure (black) in column 08, Furniture, Furnishings and Equipment Issued.

Equipment Ledger:

Adjust the individual item sheets and control sheets by recording as an expenditure by unit price adjustment the difference between the value of the items at standard unit price and the value at current unit price.



(Not Restricted)

- (7) The applicable Standard Price Supplement is the authority for adjustment and shall be cited as a reference on each General Ledger Adjustment Voucher covering price adjustments. There shall also be shown on each copy of each General Ledger Adjustment Voucher the accounting entries required to record the adjustment in the general ledger and expense analysis register.

## B. SHIPS AND STATIONS

- (1) Determine the money value of the book inventory of each item of Medical Supply Catalog supplies and equipment on hand at current unit price as shown in the respective property ledgers.
- (2) Determine the money value of the book inventory of each item of Medical Supply Catalog supplies and equipment on hand at standard unit price.

## EQUIPMENT

- (3) Prepare an Inventory Adjustment Voucher using Receipt/Expenditure Invoice (NavSandA 127) and showing thereon for each item of Medical Supply Catalog equipment affected: (a) the current unit price; (b) the revised unit price; (c) the money value of the book inventory of each item of equipment on hand at current unit price; (d) the money value of the book inventory of each item of equipment on hand at the revised unit price; (e) the total increase in book value of each item due to price adjustment; or (f) the total decrease in book value of each item due to price adjustment. Medical Supply Catalog stock numbers alone are sufficient to identify the item on the adjustment voucher and will provide sufficient space on the form for data prescribed above. Each such voucher should be numbered in a separate series by fiscal years and should be identified as Inventory Adjustment Voucher No. 1-47, 2-47, etc.

## Journal of Receipts and Expenditures:

- (a) An additional column headed "Inventory Adjustment" shall be added to each section of the Journal of Receipts and Expenditures of Medical Department Property, in which shall be recorded the value of inventory adjustments due to price adjustments as well as other authorized inventory adjustments.

(Not Restricted)

- (b) If the value of book inventory at standard unit price is greater than the book value at current unit price, record the net difference between the two totals as a receipt in the inventory adjustment column of the equipment section of the journal, with proper identification of the adjustment voucher in the "remarks" column. Include the amount of each such receipt adjustment on line 6 of the Statement of Receipts and Expenditures of Medical Department Property (NavMed E) and identify each such adjustment voucher in analysis (4) on the reverse thereof.
- (c) If the value of the book inventory at standard unit price is less than the book value at current unit price, record the net difference between the two totals as an expenditure in the inventory adjustment column of the equipment section of the journal, with proper identification of the adjustment voucher in the "remarks" column. Include the amount of each such expenditure adjustment on line 13 of the Statement of Receipts and Expenditures of Medical Department Property (NavMed E) and identify each such adjustment voucher in analysis (7) on the reverse thereof.

Equipment Ledger:

Adjust the individual item sheets and control sheets, when subparagraph (3) (b) above applies, by recording as a receipt the difference between the value of book inventory at standard unit price and the value at current unit price; when subparagraph (3) (c) above applies, record as an expenditure the difference between the value of book inventory at standard unit price and the value at current unit price.

SUPPLIES

- (4) Prepare an inventory adjustment voucher using Receipt/Expenditure Invoice (NavSandA 127) and showing thereon for each item of Medical Supply Catalog supplies affected: (a) the current unit price; (b) the revised unit price; (c) the money value of the book inventory of each item of supplies on hand at current unit price; (d) the money value of the book inventory of each item of supplies on hand at the revised unit price; (e) the total increase in book value of each item due to price adjustment; or (f) the total decrease in book value of each item due to price adjustment. Medical Supply Catalog stock numbers alone are sufficient to identify the item on the adjustment voucher and will provide sufficient space on the form for the data prescribed above. Each such voucher should be numbered in a separate series



(Not Restricted)

by fiscal years and should be identified as Inventory Adjustment Voucher Nos. 1-47, 2-47, etc.

Journal of Receipts and Expenditures:

- (a) See subparagraph (3) (a) above.
- (b) If the value of book inventory at standard unit price is greater than the book value at current unit price, record the net difference between the two totals as a receipt in the inventory adjustment column of the supplies section of the journal, with proper identification of the adjustment voucher in the "remarks" column. Include the amount of each such receipt adjustment on line 23 of the Statement of Receipts and Expenditures of Medical Department Property (NavMed E) and identify each such adjustment in analysis (4) on the reverse thereof.
- (c) If the value of book inventory at standard unit price is less than the book value at current unit price, record the net difference between the two totals as an expenditure in the inventory adjustment column of the supplies section of the journal with proper identification of the adjustment voucher in the "remarks" column. Include the amount of each such expenditure adjustment on line 42 of the Statement of Receipts and Expenditures of Medical Department Property (NavMed E) and identify each such adjustment voucher in analysis (7) on the reverse thereof.

Supplies Ledger:

Adjust the individual item sheets and control sheets, when subparagraph (4) (b) above applies, by taking up as a receipt the difference between the value of book inventory at standard unit price and the value at current unit price; when subparagraph (4) (c) above applies, record as an expenditure the difference between the value of book inventory at standard unit price and the value at current unit price.

\* \* \* \* \*

Circular Letter 46-80

6 May 1946

(Not Restricted)

To: Commanding Officers, All Marine Corps Posts and Stations within the Continental United States.

(Not Restricted)

Subj: Marine Corps Separation Procedures, Medical Department Processing in.

- Refs: (a) BuMed-MarCorps-BuPers joint letter dated 2 August 1945; Navy Department Bulletin of 15 August 1945, 45-998.  
(b) BuMed-MarCorps-BuPers joint letter dated 31 October 1945, Navy Department Bulletin of 31 October 1945, 45-1575.  
(c) BuMed Circ. ltr. 46-6 dated 8 January 1946; Navy Department Bulletin of 15 January 1946, 46-116.  
(d) BuMed Circ. ltr. 46-28 dated 21 January 1946; Navy Department Bulletin of 31 January 1946, 46-260.  
(e) Alnav 78-46 dated 13 February 1946; Navy Department Bulletin of 15 February 1946, 46-345.  
(f) BuMed Circ. ltr. 46-35 dated 4 February 1946; Navy Department Bulletin of 15 February 1946, 46-364.  
(g) Paragraph 229, Manual of the Medical Department (Rev. 1945).  
(h) Paragraph 2215.5 Manual of the Medical Department (Rev. 1945).  
(i) Marine Corps Letter of Instruction No. 1190.

1. A spot check of medical records of Marine Corps personnel on file in the Physical Qualifications and Medical Records Division, Bureau of Medicine and Surgery revealed that many examining officers are not complying with existing directives resulting in the following discrepancies:

a. Long delay or failure in forwarding terminated medical records to the Bureau of Medicine and Surgery.

See Reference (e).

b. Records are improperly assembled and forwarded.  
See References (c), (g), and (h).

c. NavMed H-2's are not properly terminated. Failure to show type and reason of discharge, and failure to summarize all defects are common errors.

d. NavMed H8's are not properly completed. Common errors are:

(1) Failure to list all specific defects.

(2) Failure to show results of serological examinations.

See Reference (b).

(3) Failure to show results, date, place, and film number of photofluorographic chest examinations. See Reference (d).

(4) Failure to obtain waiver of naval treatment or hospitalization. See Reference (a).



(Not Restricted)

- e. Photostatic or typewritten copies of health records and signed carbon copies of NavMed Form Y are not being prepared in accordance with Article 11, B, 6, paragraph 5 (g) of Separation Procedure (Standard Operating Procedure) USMC, quoted here:

"Photostatic copies of health records are to be submitted together with reports of physical examination and medical survey (if indicated) in all cases in which claim for disability is to be filed with Veterans' Administration. Where photostatic equipment is not available, typed transcripts of the health records are to be submitted."

- f. Common errors on NavMed Form Y's are:

- (1) Failure to show service numbers following the name of the separatee.
- (2) Results of the photofluorographic chest examination and of the serological examination not shown.
- (3) Failure to list all abnormalities and defects.

2. Marine Corps commanding officers will bring this letter to the attention of the medical officer responsible for the physical examination of discharges at their stations.

3. If present directives as pertain to physical and dental examinations cannot be followed because of lack of facilities on station, arrangements will be made by the commanding officer or medical officer to have dischargée examined at at such nearby stations as can complete proper examination. When this is not practicable, or when it is apparent that personnel cannot be discharged within seven (7) days, they will be transferred to a separation activity in accordance with paragraph 3, B (2)B of Reference (i).

--BuMed. Ross T. McIntire.

--MarCorps. A. A. Vandegrift.

\* \* \* \* \*

Circular Letter 46-81 (See page 47)

\* \* \* \* \*

Disestablishment of Naval Medical Activities, As published in the Navy Department Semimonthly Bulletin of 30 April 1946, the following Naval Medical activities were disestablished as of the dates shown:

| Name                            | Location              | Disestablishment Date |
|---------------------------------|-----------------------|-----------------------|
| U.S. Naval Dispensary           | Miami Beach, Florida  | 30 June 1946          |
| U.S. Naval Medical Store-houses | Charleston, S. C.     |                       |
|                                 | Newport, Rhode Island | 1 September 1946      |

\* \*

(Not Restricted)

Redesignation of U. S. Naval Hospital, Naval Center, Sampson, N. Y.

To: All Ships and Stations.

Subj: U. S. Naval Hospital, Naval Center, Sampson, N. Y. - Redesignation of.

Ref: (a) SecNav ltr. serial 162013, of 25 Sept. 1942; N.D. Bul. Cum. Ed. 1943, 42-684, p. 5.

1. The U. S. Naval Hospital, Naval Center, Sampson, New York, established by reference (a), is redesignated, effective 1 July 1946, under a Medical Officer in Command, as follows:

U. S. Naval Hospital,  
Sampson, New York.

3435-748

This is an activity of the Third Naval District under the technical control of the Bureau of Medicine and Surgery.

2. Bureaus and offices concerned take necessary action.

--SecNav. James Forrestal.

\* \* \* \* \*

ALNAV 183

17 April 1946

(Not Restricted)

Subj: Nurse Corps Pay and Allowances.

1. Public Law 244, approved 3 December 1945, provides, effective 10 July 1944 and until 6 months after war, members Navy Nurse Corps shall receive same pay and allowances now or hereafter prescribed by law for officers Regular Navy. Rates of pay shown tables I and II, art. 2140-0, SandA, Memo, applicable members of Navy Nurse Corps. Table III hereby modified accordingly. In computing service for all pay purposes nurses shall be credited full time for all periods of active duty during which they held appointment as Regular or Reserve nurses or commissions in Army or Navy Nurse Corps. Disbursing officers authorized make credit on present pay record higher pay period reason of length of service.

2. Credit subsistence allowance accordance art. 2147-3 (a), SandA Manual commencing 1 May 1946. Adjustment of accounts prior this date by reason subsistence in kind not required.



(Not Restricted)

3. Above instructions do not modify existing requirements that members Nurse Corps attached to naval hospitals shall be quartered on hospital reservations to the extent that quarters for nurses are available, and use existing messing facilities. Subsistence checkage for one ration per diem regardless of actual meals taken shall be made at 75 cents per ration. Instructions regarding reporting of subsistence of officer personnel in hospital ration records also applicable to members Nurse Corps. Present instructions regarding preparation lines 9, 83, and 102, hospital ration record, contained in BuMed Circular Letter on that subject and par. 1413, Manual Medical Department, USN, 1945, edition, hereby modified accordingly.

--SecNav. James Forrestal.

\* \* \* \* \*

ALNAV 195

22 April 1946

(Not Restricted)

Subj: Disposition of Narcotics.

All excess narcotics and all narcotics unfit for use, regardless of condition or quantity, shall be transferred to nearest medical supply storehouse or medical supply depot. Shipment or delivery shall be made under security conditions and receipt obtained in each instance.

--SecNav. James Forrestal.

\* \* \* \* \*

ALNAV 197

23 April 1946

(Not Restricted)

Subj: Transfer to Regular Navy (Dental Corps).

Inasmuch as legislation has been enacted authorizing the transfer of officers of the Naval Reserve to the Regular Navy, Reserve dental officers are urged to submit their applications immediately for transfer to the Regular Navy in accordance with BuPers Circular Letter 288-45 in order that existing vacancies in the Dental Corps may be filled promptly.

--SecNav. John L. Sullivan.

\* \* \* \* \*

ALNAV 198

23 April 1946

(Not Restricted)

Subj: Regular HC Personnel on Board.

(Not Restricted)

All activities submit immediately by air mail to BuMed a complete NavMed HC-3 card on all Regular Navy Enlisted Hospital Corps personnel on board and forward copies by air mail to appropriate personnel distribution commands. All ships, stations, and units under jurisdiction of Atlantic and Pacific Fleets for personnel accounting purposes will submit copies of NavMed HC-3 to ComServSubordComLant and ComWesSeaFron, respectively, with additional information copy from Pacific activities to ComServPac. Activities in continental U. S. except ONOP officers; Field Branch, BuSandA, Cleveland, Ohio; Navy Unit, Camp Detrick, Frederick, Md.; Navy Dispensary, Navy Dept.; and Navy and Marine recruiting will submit copies to district commandant or chief air functional training command having personnel jurisdiction. Reference this Alnav on line 8 of NavMed HC-3. Line 4 must show current status, i.e., duty, for further transfer giving ultimate destination, temporary duty giving name of permanent duty station, under treatment giving name of permanent duty station from which received, under instruction giving type instruction, etc. Great care must be exercised in preparation of NavMed HC-3 to insure USN entry after rate on line 1 (a), current expiration of enlistment date on line 2 (a), and that Hospital Corpsman having technical and special qualifications are reported on line 9 and 10. Indicate distribution of copies on line 14 of each card submitted. Also this line give date last extension or reenlistment effected and include executed agreements to extend or reenlist. Hospital Corps personnel not reported this Alnav by reason of being in transit or leave status will be reported immediately by first receiving activity. Proper accounting and equitable distribution of hospital corps personnel require immediate submission of NavMed HC-3 on any change of status in accordance with current instructions. Also prompt submission of NavMed HC-4 in accordance with instructions is essential and it is desired to emphasize the importance of showing current authorized operating allowance on face of report and USN after rate of personnel listed on reverse of report. Copies of all NavMed HC-3 cards and NavMed HC-4 forms submitted to BuMed shall be promptly forwarded to personnel distribution commands as indicated in paragraph 1 above.

--SecNav. John L. Sullivan.

\* \* \* \* \*

To: All Ships and Stations.

(Not Restricted)  
Pers-66-WH, QRI  
22 April 1946Subj: Physical Classification of Fleet Reservists.

Refs: (a) BuPers ltr. Pers-66-JMS, QRI/P19-2, of 9 Feb. 1943; N. D. Bul. Cum. Ed. 1943, 43-369, p. 690.  
(b) Arts. H-9604 and H-9804, BuPers Manual.  
(c) Joint BuMed-MarCorps-BuPers ltr. BuMed-RP-IMB, P2-5/P19-1; MarCorps 1865-20; BuPers P2-5, of Aug. 1945; N. D. Bul. of 15 Aug. 1945, 45-998.



(Not Restricted)

1. Reference (a) is canceled.
2. The provisions of reference (b), which were temporarily held in abeyance by reference (a), are hereby made operative.
3. The attention of commanding officers is invited to reference (c), particularly paragraph 5 thereof, which directs that men physically examined for transfer to Fleet Reserve (classes F-4 and F-5) and found to have defects or disabilities of such nature as to disqualify them for duty at sea shall be brought before a board of medical survey and a report shall be submitted on NavMed M. A report on NavMed Y shall be submitted for enlisted personnel found physically qualified for all the duties of their rating at sea and on shore.
4. Those men physically examined for transfer to the Fleet Reserve will be physically classified by BuPers, after transfer is effected, as follows:

A. Class F-4:

- Class A. Those fit for the duties of their ratings at sea, with due allowance for age and length of service.
- Class B-1. Physically qualified for mobilization ashore only (including foreign shore).
- Class B-2. Physically qualified for mobilization shore, only, limited to duty within the continental limits of the United States.
- Class C. Those unfit for any duty.

Those men physically examined for transfer to classes F-4-C and F-4-D of the Fleet Reserve who are found unfit for any duty will be transferred to the **Fleet Reserve**, so classified, and placed on the retired list of the Regular Navy upon receipt of authority from BuPers.

B. Class F-5:

- Class A. Those fit for the duties of their ratings at sea, with due allowance for age and length of service.
- Class B-1. Physically qualified for mobilization ashore only (including foreign shore).
- Class B-2. Physically qualified for mobilization ashore only, limited to duty within the continental limits of the United States.

Attention is invited to the fact that men being physically examined for transfer to the Fleet Reserve, class F-5, must be physically and otherwise qualified to perform duty in time of war. Those men physically examined for transfer to this class of the Fleet Reserve who are not qualified to perform duty in time

(Not Restricted)  
of war normally will be discharged from the naval service. However, all cases of this nature shall be referred to BuPers for final decision. If discharge is directed by BuPers, such individuals shall be informed of their privilege to apply either for (1) relief under Revised Statute 4756, or (2) veterans' benefits from Veterans' Administration.

5. Fleet Reservists, class F-4 or F-5, who are subsequently physically examined and found unfit for any duty will be transferred to the retired list of the Regular Navy upon receipt of authority from BuPers.

--BuPers. T. L. Sprague.

Approved: 18 April 1946

--John L. Sullivan,  
Acting Secretary of the Navy

\* \* \* \* \*

Circular Letter 46-76

9 May 1946

(Not Restricted)

To: All Ships and Stations.

Subj: Pension Claims and Medical Records of Persons Separated from the Service.

- Ref:
- (a) BuMed C/L P3-5/P19-1(034-42) dated 26 Feb 1944 addressed to AlNavHosps and ConvHosps in Continental United States.
  - (b) BuMed C/L P3-5/P19-1(034-42) dated 14 Mar 1944 addressed to NavHosps and ConvHosps within Army Service Command Areas Nos. III and IV.
  - (c) BuMed C/L QR/P19-3 dated 26 Sep 1945 addressed to NavPersSepCens.
  - (d) BuMed C/L QR/P19-3 dated 3 Dec 1945 addressed to NavPersSepCens and MarCorpsSepCos.
  - (e) BuMed C/L P3-5/P19-1(034-42) dated 4 Dec 1945 addressed to NavPersSepCens.
  - (f) BuMed C/L 46-6 dated 8 Jan 1946 addressed to All Ships and Stations.
  - (g) BuMed C/L 46-44 dated 20 Feb 1946 addressed to NavPersSepCens and MarCorpsSepCos.
  - (h) BuMed C/L 46-61 P3-5/P19-1(034-42) dated 30 Mar 1946 addressed to NavPersSepCens and MarCorpsSepCos.



(Not Restricted)

Encl: 1. (HW) List of all Veterans Administration Regional Offices and Centers showing territory allocated to each.\*

1. This letter supersedes the above noted references which are hereby canceled.
2. When an individual is discharged from the service his health record shall be disposed of as follows:

- (a) Terminate the health record. (See par. 2243, M.M.D.)
- (b) Detach and destroy health record cover (NavMed Form H-1).
- (c) Place NavMed Form H-2 on top of the other "H" Forms.
- (d) Fold original signed copy of NavMed Form Y (Reports of the final physical examination) once to 4" x 10 1/2", place on bottom of NavMed "H" Forms and staple at top.

These records shall be forwarded to the Bureau of Medicine and Surgery within 72 hours after the individual concerned has been discharged from the service. Letters of transmittal are not required.

3. When an individual is released to inactive duty his health record shall be disposed of as follows:

- (a) Medical history sheets (NavMed Forms H-8) containing entries and dental record (NavMed Form H-4) shall be attached to the report of the final physical examination (NavMed Form Y) and forwarded to the Bureau of Medicine and Surgery. The remainder of the health record, after appropriate entries have been made in abstracts, shall be forwarded to the Commandant of the Naval District, or in the case of Marine Corps personnel to the Commander of the Marine Corps District, in which the individual intends to reside.
- (b) In those cases where the medical history sheets to be forwarded to the Bureau contain entries of serious illness or injuries which might be of interest to medical officers who may be called upon at some future date to determine the individual's physical fitness for further active service, a brief resume of such entries shall be made on a medical history sheet and retained in the health record as a supplement to the abstract of medical history (NavMed Form H-5).

\* Note: See Navy Department Semimonthly Bulletin of 15 May for this list, which, because of its length and limited usefulness is not reprinted in Bumed News Letter.

(Not Restricted)

4. If an individual is released from active duty or discharged from the service and his current health record is not available the following procedure shall be carried out:

- (a) On blank NavMed Form H-2 enter full name, rank or rate, date and place of birth, and service or file number.
- (b) Terminate the Form H-2 with appropriate entry.
- (c) Make the usual termination entry on NavMed Form H-8.
- (d) In the case of those who are discharged from the service, forward the Forms H-2 and H-8 to the Bureau of Medicine and Surgery; in the case of Naval Reserves released to inactive duty, forward the forms to their home district. (See paragraph 3).

If an individual's health record is received after he has been separated from the service, the record should be disposed of in accordance with paragraph 2 or 3 as may be appropriate, with a memorandum attached indicating that a skeleton record (Forms H-2 and H-8) has been previously prepared and forwarded.

5. When a claim for a pension is submitted by an individual who is being released to inactive duty, discharged or otherwise separated from the service, the following medical records are required by the Veterans Administration and should accompany the pension claim to the designated Veterans Administration Regional Office or Center. (See paragraph 6).

- (a) Photostatic or typewritten copy of entire health record, (except cover).
- (b) Signed carbon copy of final NavMed Form Y, with dental chart completed.
- (c) Photostatic or carbon copy of NavMed Form M, in the case of persons discharged from the service upon recommendation of Boards of Medical Survey.

When these records have been prepared, the original records shall be forwarded in accordance with the instructions in paragraph 2 or 3 as appropriate.

6. According to information received from the Administrator of Veterans Affairs, the nine Veterans Administration Area Offices listed in reference (a) and (b) are to be discontinued on or before June 30, 1946. Beginning June 1, 1946 the pension claims and medical records listed in paragraph 5 shall be forwarded to the Veterans Administration Regional Offices or Centers having jurisdiction over the home addresses of the individuals concerned. A list of



(Not Restricted)

the Veterans Administration Regional Offices and Centers showing territories allocated to each is enclosed.\*

--BuMed. Ross T. McIntire.

\* \* \* \* \*

Circular Letter 46-81

14 May 1946

(Not Restricted)

To: Comdts, NavDists, RivComds, and AirTraComds.

Subj: Air Transportation for Remains of Deceased Naval Personnel.

1. A letter addressed to this Bureau by Commander, Naval Air Transport Service, 6 February 1946, states in part:

"It is not considered that human remains are acceptable for transportation on NATS aircraft. This type shipment clearly does not require or warrant the expeditious handling afforded by air transportation. The carriage of passengers and human remains within the restricted confines of an aircraft cabin is also objectionable from an aesthetic viewpoint. Further, the deferential treatment and stowage of such shipments dictated by custom would present loading difficulties and probable loss of payload".

It was further considered that air transportation for remains of the dead within the forty-eight continental States is not needed and cannot be justified; also that such transportation is not needed and cannot be justified for use at overseas activities when surface transportation is reasonably available.

2. This Bureau is in entire accord with the statements and policies of the NATS as quoted above and in accordance with these policies the following procedure has been adopted:

- (a) Normally, air transportation will not be authorized for the transportation of remains. However, outside of the continental limits of the United States and in Alaska when transportation by surface ship is not within reasonable time limitations (as, for example, a delay of more than two weeks

\*Note: See Navy Department Semimonthly Bulletin of 15 May for this list, which, because of its length and limited usefulness is not reprinted in Bumed News Letter.

(Not Restricted)

in departure), when the circumstances sufficiently justify, and when practicable, transportation by aircraft may be requested.

- (b) Air transportation for remains of the dead will not be requested or provided within the forty-eight continental States and the District of Columbia.
- (c) Request for air transportation from overseas activities will be addressed to BuMed, stating the circumstances and requesting that necessary arrangements be made. Transportation by air, when authorized, always will be to a naval activity in the United States in order that the arrangements for further transportation to final destination, as directed by BuMed, may be in the hands of naval authorities and that the remains may be inspected prior to such further transportation.

3. It is desired that the policy and procedure outlined above be strictly observed in order that the remains of naval dead, regardless of rank or rate, may be transported on a basis of strict equality.

4. For the time being the provisions of this letter have application only within continental United States and with respect to the 10th, 14th, 15th, and 17th Naval Districts or to ships which can transfer their dead to a shore activity in one of these Districts. When it is again possible to return home the remains of those who die in other overseas areas, the Service will be so informed and then this policy with respect to air transportation for the remains of the dead will be applicable to the entire Navy.

--BuMed. Ross T. McIntire.

\* \* \* \* \*